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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,420	04/19/2001	Frederic Bauchot	FR920000032US1	3568

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EXAMINER
STEVENS, ROBERT

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/838,420	BAUCHOT ET AL.
	Examiner	**Art Unit**	
	Robert M Stevens	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *19 April 2001*.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-11* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-11* is/are rejected.

7) ☒ Claim(s) *1,2,4,6 and 7* is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *06 August 2001* is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All b) ☐ Some * c) ☐ None of:

    1. ☐ Certified copies of the priority documents have been received.

    2. ☐ Certified copies of the priority documents have been received in Application No. _____.

    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
    application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-11 are pending in Application No. 09/838,420, entitled "Method and System in an Electronic Spreadsheet for Managing and Handling User-Defined Options", filed April 19, 2001, claiming benefit by virtue of foreign (French) application 00480060.3 filed with the European Patent Office on 7/13/2000.

2.   The Office notes that the August 6, 2001 submission by Applicant failed to correct the drawing deficiencies referenced in the "Notice to File Corrected Papers", mailed 6/18/2001. See "drawings" section, below, and the enclosed Form PTO-948 (Notice of Draftsperson's Patent Drawing Review)."

3.   No IDS has been filed as of the date of this communication.

4.   Acknowledgement is made of a claim for foreign priority under 35 USC 119 (a)-(d) or (f).

Drawings

5.   New corrected drawings are required in this application because drawings do not conform to the margin specifications set forth in 37 CFR 1.84(g). Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

1.   Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2.   The abstract of the disclosure is objected to because: (1) it merely reiterates the claims; and (2) it uses phrases which may be implied, such as "The present invention relates to". Correction is required. See MPEP § 608.01(b).

3.   The disclosure is objected to because of the following informalities:

    a.   Page 3 line 25: "used ," should be "used,". Please correct all spelling/grammatical/etc. issues throughout the specification;

    b.   Page 4 lines 18-19 mention "versions and version groups," but does not define these terms (which appear to be Lotus 1-2-3 concepts); and

    c.   Page 23 lines17-25 indicate that an Option Manager Dialog Box is updated with invalid names (please explain).

Appropriate correction is required.

4.   **All** non-patent literature relied upon for background information and cited throughout the specification (an example is found on page 2 line 32 continuing onto page 3 line 1) needs to be submitted via an IDS or as an appendix to the specification.

Claim Objections

5.   Claims 1, 2, 4, 6 and 7 are objected to because of the following informalities:

    a.   Regarding claims 1, 2 and 4, the last limitation should be preceded by "and"; and

    b.   Regarding claims 6 and 7, a ";" should separate limitations within the body of the claim;

    Appropriate correction is required.

Claim Rejections - 35 USC § 101

6.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7.   **Claims 1-7, 10 and 11 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter.

Claims 1-7 are directed to subject matter that is not tangibly embodied. The claims read on a mental process that could be carried out using paper and pencil. At best, the claimed invention reads on a computer program per se. Therefore, the claimed invention is directed to subject matter that is not within the technological arts.

Claims 10 and 11 are directed to software programs, per se, not tangibly embodied in a computer readable medium.

Claim Rejections - 35 USC § 112

8.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9.   **Claim 10 is rejected under 35 U.S.C. 112, first paragraph** as a single means claim of undue breadth. *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983)

10.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11.   **Claims 2, 7 and 9 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, a status value appears to be predetermined by the activation state of a boolean variable. It is unclear as to how "selecting a status value" is further limiting claim 1.

Regarding claim 9, there is a lack of antecedent basis for the limitation "said interactive user interface". For the purposes of examination, the Office considers claim 9 to be dependent upon claim 8.

Claim Rejections - 35 USC § 102

12.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13.   **Claims 1, 2, 4, 6, 10 and 11 are rejected under 35 U.S.C. 102(b)** as being anticipated by the Aaron T. Blood authored spreadsheet entitled "sum_if", (downloaded from www.xl-logic.com/pages/formulas.html, published August 19,

1999, and hereafter referred to as "Blood"). The Office has supplied screen

captures (numbered 1-3, 4A-4C and 5-12) of the sum_if spreadsheet and its

properties.

Regarding independent method claim 1, Blood discloses:

*A method of processing user defined boolean variables in a multi
dimensional spreadsheet comprising a plurality of cells identified by a cell
address along each dimension, said method comprising the steps of:*
  * defining one or a plurality of boolean variables in a table;
(screen capture 4A, col. D rows 2-11)
  ** referencing said one or plurality of boolean variables in one
or a plurality of cells;* (screen capture 4A, noting the cell A12
formula reference of the D2-D11 boolean values)
  * activating one or plurality of boolean variables in said table;
(screen capture 4A, noting the activated D2-D5 boolean values)
  ** determining the content of said cell or plurality of cells
depending on whether said one or plurality of boolean variables are
activated or not in said table.* (screen capture 4A, noting that the
content of cell A12 depends upon the activation state of the D2-D11
boolean values)

Regarding claim 2, which is dependent upon claim 1, Blood discloses:

*wherein said step of defining one or a plurality of boolean variables
in a table, comprises the further steps of:*
 for each defined boolean variable:
  * assigning a name and storing the table said name; (screen
capture 4B, noting the name "Gate" stored in cell D1 of the table)
  ** selecting a status value depending on whether the boolean
variable is activated or not and storing in the table said status
value.* (screen captures 4B, noting the storage of status value in
cells D2-D11, and 4C, noting the selection of a status value for an
activated boolean variable)

Regarding claim 4, which is dependent upon claim 1, Blood discloses:

> *wherein the step of determining the content of said cell or plurality of cells depending on whether said one or plurality of boolean variables are activated or not, comprises the further step of:*
> ** determining, referring to the table, whether the one or the plurality of boolean variables referenced in the cell or plurality of cells are activated or not;* (screen capture 4A, col. D rows 2-11)
> ** computing the value of said cell or plurality of cells according to the value of said one or plurality of activated boolean variables.* (screen captures 4A, 5 and 6, noting the formulas associated with cells A12, B12, and C12, respectively, in which said formulas incorporate the activation state of the boolean variables into the computation process)

Regarding claim 6, which is dependent upon claim 1, Blood discloses:

> *wherein said step of selecting a status value depending on whether the boolean variable is activated or not comprises the further steps of:*
> ** setting the status value the boolean variable to "true" if said boolean variable is activated,* (screen capture 4A, col. D rows 2-5) *and*
> ** setting the status value of the boolean variables to "false" if said boolean variable is not activated.* (screen capture 4A, col. D rows 6-11)

Regarding independent claim 10:

> *A system comprising means adapted for carrying out the method according to claim 1.*

Claim 10 is substantially similar to independent method claim 1, and thus

is likewise rejected.

Regarding independent claim 11:

> *A computer program comprising computer readable instructions adapted for carrying out the method according to claim 1.*

Claim 11 is substantially similar to independent method claim 1, and thus

is likewise rejected.

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

15.   **Claims 3, 5, 8 and 9 are rejected under 35 U.S.C. 103(a)** as being

unpatentable over the Aaron T. Blood authored spreadsheet entitled "sum_if",

(downloaded from www.xl-logic.com/pages/formulas.html, published August 19,

1999, and hereafter referred to as "Blood") in view of Susan M. Shaw (editor),

Using 1-2-3 Release 2.4, Special Edition, Que Corporation, (c) 1992, pp. 54-56,

77-79, 141, 142 and 270-274 (hereafter "Shaw").

Regarding claim 3, which is dependent upon claim 1, Blood does not

explicitly disclose:

> *wherein said step of activating one or plurality of boolean variables
> in said table, comprises the further step of:*
> > * *updating in the table the status value of the one or plurality
> > of activated boolean variables.*

Shaw, however discloses this limitation on pp. 141-142 under the heading

"Using /Range Input", and especially noting the second paragraph on page 142

describing the editing of cells.

It would have been obvious to one of ordinary skill in the art at the time of

the invention to apply the teachings of Shaw for the benefit of Blood because to

do so would provide a spreadsheet programmer with a capability to limit data

entry to select areas as taught by Shaw in the second paragraph under the page

141 heading "Using /Range Input."

Regarding claim 5, which is dependent upon claim 1, Blood does not

explicitly disclose:

> *comprising the further step of:*
> > * *changing the table the name of one or a plurality of*
> *boolean variables.*

Shaw, however, discloses this limitation on pp. 77-79, especially Fig. 3.7

and the first full paragraph on p. 78 ("Because ... more readable."], and on page

79 the paragraph describing Fig. 3.7 ("In figure 3.7, ...). These passages

discuss the inputting of labels (i.e., names) like the cell D1 value "gate", which

names the plurality of boolean variables in screen capture 4B of the Blood sum_if

spreadsheet.

It would have been obvious to one of ordinary skill in the art at the time of

the invention to apply the teachings of Shaw for the benefit of Blood because to

do so would allow programmers to clarify the meaning of numbers and formulas

in spreadsheets as taught by Shaw in the first two sentences under the page 77

heading "Entering Labels".

Regarding claim 8, which is dependent upon claim 1, Blood does not

explicitly disclose:

> *wherein said steps of assigning a name, changing the name,*
> *selecting a status value, updating the status value are executed by means*
> *of an interactive user interface.*

Shaw, however, discloses this limitation on pages 54-55, especially the

last paragraph on page 54 continuing through the second paragraph on page 55

where Shaw discusses text boxes for manipulating text (e.g., names or status

values) and numbers (possible status value).

It would have been obvious to one of ordinary skill in the art at the time of

the invention to apply the teachings of Shaw for the benefit of Blood because to

do so would help a user keep track of choices made and current settings as

taught by Shaw on page 54 (refer especially to the first paragraph under the

heading "The Interactive Dialog Boxes".

Regarding claim 9, which is dependent upon claim 1, Blood does not

explicitly disclose:

> *wherein said interactive user interface comprises a dialog box*
> *displayed on a screen of a computer system.*

Shaw, however, discloses this limitation on pages 54-55, especially Fig.

2.13.

It would have been obvious to one of ordinary skill in the art at the time of

the invention to apply the teachings of Shaw for the benefit of Blood because to

do so would help a user keep track of choices made and current settings as

taught by Shaw on page 54 (refer especially to the first paragraph under the

heading "The Interactive Dialog Boxes".

16.   **Claim 7 is rejected under 35 U.S.C. 103(a)** as being unpatentable over

the Aaron T. Blood authored spreadsheet entitled "sum_if", (downloaded from

www.xl-logic.com/pages/formulas.html, published August 19, 1999, and hereafter

referred to as "Blood") in view of Friedman et al., <u>Problem Solving, Abstraction,</u>

<u>and Design Using C++, 2nd Edition</u>, Addison-Wesley, June 1997, pp. 165-167,

406-412, and 540-543 (hereafter "Friedman").

Regarding claim 7, which is dependent upon claim 1, Blood does not

explicitly disclose:

> *comprising the further step of:*
> ** setting the value of the boolean variable to one when the status value is "true", or*
> ** setting the value of the boolean variable to zero when the status value is "false".*

Friedman, however, discloses both of these limitations in the first sentence

of page 167. (If you ... 0 for false and 1 for true.")

It would have been obvious to one of ordinary skill in the art at the time of

the invention to apply the teachings of Friedman for the benefit of Blood because

to do so would allow programmers to represent true and false values in a

programming environment which has not implemented boolean data types as

taught by Friedman on page 167 in the paragraph following the heading "If Type

bool is Not Implemented on Your C++ compiler."

Conclusion

17.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Non-patent Literature

"Formulas and Logic Downloads", www.xl-logic.com/pages/formulas.html, downloaded by Examiner on 6/17/2004.

Blood, Aaron T., "cond_sum_array SpreadSheet", Jan 6, 2000 (www.XL-Logic.com).

Blood, Aaron T., "equal_val SpreadSheet", Aug 10, 2000 (www.XL-Logic.com).

Blood, Aaron T., "option_box SpreadSheet", Jul 16, 1999 (www.XL-Logic.com).

Blood, Aaron T., "same_or_diff SpreadSheet", Sep 1, 1999 (www.XL-Logic.com).

Blood, Aaron T., "sum_between_switches SpreadSheet", Sep 3, 1999 (www.XL-Logic.com).

Gold et al., The Complete Idiot's Guide to Microsoft Excel 97, 2nd Edition, Que Corporation, Que Corporation, pp. 53-62 (©1998).

Granel, Vincent, "The Xxl Spreadsheet Project", Linux Journal, vol. 1999, issue 60es (April 1999), ISSN: 1075-3583. (http://delivery.acm.org/10.1145/330000/327756/a27-linux_journal_staff.html?key1=327756&key2=5612137801&coll=ACM&dl=ACM&CFID=22784040&CFTOKEN=16685440).

Jamsa et al., Jamsa's C/C++ Programmer's Bible : The Ultimate Guide to C/C++ Programming, Jamsa Press, Houston, TX, sections 87106, 1161, 1162, 1228 and 1229 (© 1998).

"Spreadsheet Programming: The New Paradigm in Rapid Application Development", Knowledge Dynamics, Inc., © 2002 (www.KnowledgeDynamics.com)

US Patent Application Publications

Prateley et al	US2001/0049699
Gelfand	US2002/0038303

US Patents

Koss	5,231,577

Young et al	5,280,575
Yarnell et al	5,359,729
Greif et al	5,371,675
Ammikrato et al	5,499,180
Narayanan	5,598,519
Chi et al	6,496,832

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M Stevens whose telephone number is (703) 605-4367. The examiner can normally be reached on M-F 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (703) 305-9792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert M. Stevens
Art Unit 2176
Date: June 18, 2004

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER

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